

## **Minutes of Committee Meeting**

Transportation Asset Management Committee - ABC40  
Georgetown East, Washington Hilton  
Washington, D.C.  
January 24, 2006 1:30-5:30 PM

### **General Items**

#### **1. Introduction**

The Chairman, Sue McNeil, called the meeting to order at 1:30 PM. Agendas were distributed (agenda attached). The chair opened the meeting by welcoming committee members and friends. The chair then circulated an attendance roster and membership list for validation. Next year, the Committee must rotate one-third of the members off the committee. Currently friends 30-years age or younger will be considered for membership as “younger members”.

#### **2. TRB Staff Report**

Barbara Martin of TRB, on behalf of Tom Palmerlee, briefly discussed following items:

- TRB and Technical Activities Division Strategic Plans. The TRB is very interested in ideas to promote innovation and progress in transportation through research. A questionnaire will be sent out in March 2006 to i) collect feedback on services currently provided by TRB; ii) identify constituencies that TRB does not reach; and iii) strengthen diversity by encouraging participation of all modes of transportation in TRB activities. Relevant information can be browsed from the following Websites: TRB Strategic Plan ([http://trb.org/publications/admin/2002\\_strategic\\_plan.pdf](http://trb.org/publications/admin/2002_strategic_plan.pdf)) and Technical Activities Division Leadership Guide (<http://www4.trb.org/trb/activities.nsf>).
- Triennial Evaluation. As part of the triennial self-evaluation process, emphasizes needs to be given to the TRB critical issues and cross-cutting issues.
- Transportation Information Needs Assessment. SAFETEA-LU mandated that USDOT contract with the National Academies, ultimately with TRB, to conduct a Transportation Information Needs Assessment study. It is expected that the study results will significantly impact policies and funding for transportation data collection.
- 2007 TRB Annual Meeting Schedule and Sessions. Next year's TRB Annual Meeting starts later than usual, January 21-25, 2007 (will return back to normal week in 2008). Asset management embraces all aspects of a transportation system, ranging from infrastructure, safety, congestion, environment, to human resources. It is desirable to arrange 2007 sessions according to these topics.

### 3. Discussions on Transportation Information Needs Assessment Study

As required by SAFETEA-LU, the study will focus on the key unmet transportation information needs, likely sources to fill the gap from public and private sectors, and balancing between data quality and quantity. Some key issues discussed are listed below:

- Tim Lomax noted that asset management is a data/information driven process. In order to improve data/information currently being collected and to identify new data/information needs, a work group is required to sort out information that belongs to asset management.
- Jack Stickel and Ernest Wittwer informed meeting attendants that the issue of lack of coordination for local roads in the current planning environment was mentioned in one TRB Circular publication.
- Roy Jurgens pointed out that, in the current organizational setting, we cannot put data together across institutional boundaries.
- Tamer El-Diraby raised the concern with the lack of emergency preparedness, energy conservation, and freight transportation (trucking) considerations in current asset management practice.
- James Bryant, Jason Bittner, and Kristen Sanford Bernhardt volunteered to assist in data needs issues.
- Sue McNeil informed meeting attendants that a survey questionnaire and coherent statement will be distributed by February 17, 2007. The TRB technical committee work group is expected to be established by March 17, 2007. This issue will be discussed in the committee's 2006 mid-year meeting.

### **Committee Business**

#### 4. Paper Reviews

Tim Lomax chaired the paper reviews this year. For the 2005 TRB Annual Meeting, the committee received 13 papers overall and 4 were initially recommended for possible publication after revision.

#### 5. 2006 TRB Annual Meeting Sessions

- Session 117: Data Stewardship: Meeting the Challenges of Enterprise Data Management. Jefferson West, Hilton. Sunday, January 22, 8:30AM - 12:00PM.
- Session 245: Tools for States and Locals: Performance Measures, Asset Management, and Data Management Tools to Improve Communication and Decision Making, International Center, Hilton. Monday, January 23, 9:30AM- 12:00PM.
- Session 308: Infrastructure Management: Papers from 2005 First Annual Interuniversity Symposium on Infrastructure Management. Monroe East, Hilton. Monday, January 23, 1:30-3:15PM.
- Session 357: Asset Management: International Perspectives. Monroe East, Hilton. Monday, January 23, 3:45-5:30 PM.
- ABC40 Transportation Asset Management Committee: Full Committee. Georgetown East, Hilton. Tuesday, January 24, 1:30-5:30 PM.
- Session 671: Data Stewardship: Tools of the Trade. Monroe West, Hilton. Wednesday, January 25, 10:15AM-12:00 PM.
- Session 710: Wall Street Speaks: Transportation Asset Management and Ratings. Monroe West, Hilton. Wednesday, January 25, 2:30-4:00 PM.

- Session 731: Asset Management as a Teenager: Out in the World, But Still Learning. Monroe West, Hilton. Wednesday, January 25, 4:30-6:00 PM.

## 6. The Committee's Triennial Strategic Plans

The guidelines for Triennial Strategic Plans (TSP) was finalized by the Policy and Organization Group. Tom Maze, Francine Shaw-Whitson, and Ernie Wittwer will help prepare the report. Research needs to be discussed in summer meeting will be included as part of the report.

## 7. Coordination with LTAP

Terry McNinch, President of National Local Technical Assistance Program Association (NLTAPA), stated that FHWA and NLTAPA will formalize coordination with the TRB Transportation Asset Management Committee for technical assistance to the 38,000 local communities across the United States.

## 8. TRB/AASHTO Joint Activities on Transportation Asset Management

### a) *Update on Activities of FHWA Office of Asset Management*

David Geiger, Director of FHWA Office of Asset Management, noted that the Office maintains three technical teams: system management and monitoring, construction and system preservation, and evaluation and economic investment. The Office continues its strong commitment to provide training, tools, and deployment assistance to further advance the implementation efforts of asset management.

- Pavement Preservation Technical Assistance Program. The FHWA is partnering with state DOTs in Kentucky, New Mexico, and New Jersey to develop, expand, or improve pavement preservation programs.
- Accelerated Construction Technology Transfer (ACTT) Program. Over the past 2 years, over half of States have realized the benefits of accelerated highway construction by participating in the ACTT program.
- Short Courses. The FHWA's National Highway Institute (NHI) offers the following short courses that cover the principles, techniques, and benefits of asset management:
  - Transportation Asset Management (No. 131106)
  - The Preventive Maintenance Concept (No. 131054)
  - Selecting Pavements for Preventive Maintenance (No. 131058)
  - Design and Construction of Quality Preventive Maintenance Treatments (No. 131103)
  - Pavement Preservation: Integrating Pavement Preservation Practices and Pavement Management (No. 131104)
- Transportation Curriculum Coordination Council (TCCC). The TCCC developed more than 40 courses in an effort to provide state and local transportation agencies with the tools they need to train a qualified workforce. Topics such as surveying, Hot-Mix Asphalt (HMA) construction, bridge construction inspection, managing construction workmanship, roadside slope protection, and subsurface inspection were covered.
- Workshops. The National HERS-ST Technical Conference will be held in San Antonio, Texas in on May 22-25, 2006. Workshops on life-cycle cost analysis (LCCA) and a new Web-Based Benefit/Cost Analysis Tool provide a hands-on demonstration of LCCA concepts and application of benefit/cost analysis. Twenty seven workshops will be arranged and 17 will be planned by the end of 2006. All workshops are offered at no cost.

- Case Studies. The Office also has case studies available that highlight implementation of asset management programs. Examples include the comprehensive asset management program for roadway and stormwater infrastructure management program in Hillsborough County, Florida; Pontis bridge management systems in California, Florida, and South Dakota; and data integration experiences in Arizona, Michigan, Pennsylvania, and Virginia.
- National Highway Specification Website (NHSW). The NHSW consists of a searchable library of highway specifications from across the country (<http://www.specs.fhwa.dot.gov>).
- Focus Magazine. “Focus” magazine is the primary communications vehicle for the FHWA's infrastructure research and technology program that covers the implementation of innovative technologies in all areas of infrastructure. This includes bridge technology, pavement technology, asset management, program administration, winter maintenance, and work zone safety (<http://www.tfhrc.gov/focus/focus.htm>).
- Research and Development. Available funding for fiscal year 2006 is certain, while it is uncertain for fiscal year 2007.

*b) Roadway Safety Hardware Management*

The SAFETY-LU identified safety to be one of the most important goals of a transportation system. Rudy Umbs, from the FHWA Office of Safety, described the need to manage roadway safety hardware, such as traffic signs, markings, and guardrails, through management systems using asset management principles. To influence the upper management, case studies need to be carried out to demonstrate the benefits of systematically identifying problems, developing countermeasures, and setting priorities for safety hardware management. In the next step, actions need to be taken by the TRB Transportation Asset Management Committee to interact with TRB Safety Management Committee and AASHTO Safety Committee on the matter. Sue McNeil suggested discussing this issue in more details in the committee's summer meeting. Jack Stickel recommended involving planners of MPOs and traffic law enforcement officers so that safety be properly integrated into planning process.

*c) FHWA Office of Environment and Planning*

Gloria Shephard and Dave Geiger indicated their desire to work as close as possible to encourage asset management for planning decision-making and to promote asset management at MPOs and local transportation agencies.

*d) AASHTO Asset Management Subcommittee*

The AASHTO Asset Management Subcommittee coordinates actions for AASHTO with TRB and FHWA. Kirk Steudle, Chair of AASHTO Asset Management Subcommittee, briefly discussed the following:

- The subcommittee is reading the TRB and Technical Activities Division strategic plans.
- Request for NCHRP research proposals on Interstate highway system asset management
- 15-day international scanning study tour on transportation asset management in Australia, Canada, England, and New Zealand. The scanning panel members represented a diverse set of interests and expertise in the areas of asset management, bridge and pavement management systems, transportation policy and planning, and transportation system

operations. The study findings can be read at  
(<http://international.fhwa.dot.gov/assetmanagement/contents.htm>).

#### 9. Report from the 6<sup>th</sup> National Asset Management Conference

Katie Zimmerman and Francine Shaw-Whitson provided an overview of the 6<sup>th</sup> National Conference on Transportation Asset Management. The conference was held in Kansas City, Missouri on November 1-2, 2005, with joint sessions with the 1<sup>st</sup> National Conference on Roadway Pavement Preservation held October 31- November 1, 2005 in the morning of November 1. “Making Asset Management Work in your Organization” was the theme of the conference.

A total of 329 people participated in the asset management conference and 130 attended both conferences. Thirty two state DOTs and 14 international individuals presented the asset management conference. Over 20 technical sessions were organized. In addition, optional workshops on HERS-ST, LCCA applied to pavement analysis, and Web-Based Benefit/Cost Analysis Tool were arranged in the afternoon of November 3. In the course of the conference, more than 90 proposals for future directions and research needs were given.

#### 10. The 1<sup>st</sup> Annual Inter-University Symposium on Infrastructure Management (AISIM)

The AISIM is a full-day long informal forum that allows graduate students/researchers to share their current research work related to infrastructure management. The 1<sup>st</sup> AISIM was held at University of Waterloo, Waterloo, Canada on August 6, 2005. Five presentations from the symposium were selected by an independent panel of judges as the best presentations, which were subsequently presented in Session 308 at the 85<sup>th</sup> TRB Annual Meeting. The second AISIM will be held at University of Delaware on June 10, 2006. The registration fee is waived.

#### 11. Update on Ongoing NCHRP Projects, Proposal, and Synthesis

##### a) *NCHRP Projects by Cambridge Systematics*

- Project 20-60: Performance Measures and Targets for Transportation Asset Management. A practical guide to performance measures for transportation asset management will be posted on NCHRP project Website.
- Project 20-57: Analytical Tools to Support Transportation Asset Management. Two software tools were developed: AssetManager NT for network level analysis (up to 20 years), and AssetManager PT for program level analysis (1-3 years). NCHRP will distribute tools, as AASHTOware products, to all state DOTs.

##### b) *Project Proposal*

- Project Proposal. The project proposal for tool implementation is ongoing.

##### c) *NCHRP 37-03: Synthesis of Managing Selected Transportation Infrastructure Assets*

- The primary objective of this synthesis is to gain a better understanding of the current state of practice for managing assets other than pavements and bridges, and to identify best practices. The assets under investigation are traffic signals, lighting, signs, pavement markings / line striping, drainage culverts and pipes (other than bridges), and sidewalks. The project is led by Michael Markow (Consultant).

- Survey questionnaire was sent to state DOTs, county and city highway agencies, and Ministries of Transport in Canada. Survey responses to be collected on February 28, 2006. Panel meeting to review the draft report is scheduled in May 2006.
- To increase the response rate, it was suggested to send the survey questionnaire to LTAP and to use the NCHRP bridge management project ongoing at Purdue University. Joe Garvey recommended two useful references for this project: NCHRP Report 545- Analytical Tools for Asset Management; and NCHRP Report 551- Performance Measures and Targets for Transportation Asset Management. Crawford Jencks of NCHRP may be contacted for report details.

## 12. Update on Ongoing Activities

### a) *AASHTO Transportation Asset Management Today Website*

Omar Smadi provided a brief introduction to the Website that is dedicated to the open exchange of information and knowledge about transportation asset management (<http://assetmanagement.transportation.org>).

### b) *MRUTC Document Library for Asset Management Education and Training*

Jason Bittner discussed a document library for transportation asset management training currently maintained by the Midwest Regional University Transportation Center (MRUTC) at University of Wisconsin (<http://www.mrutc.org/tam%5Ftraining>). This online library was completed in Summer 2005. In total, 107 documents comprised of short courses, workshops, and university courses were collected. It was noted that many short courses were only offered once which cannot fill all the needs.

### c) *Proposed Projects and Syntheses in 2006*

The following topics for NCHRP and TCRP projects/syntheses were recommended:

- Optimization criteria for highway asset management, such as remaining service life, cost, and risk factors.
- Life-cycle costing analysis for non-pavement and non-bridge assets.
- Innovative financing strategies for enhanced service and funding security.
- Organizational development for successful implementation of asset management.
- Synthesis of asset management practice in construction industry.
- Synthesis of GASB34 implementation status in highway systems.
- Guide to transit asset management.
- Synthesis of transit asset management.

### d) *Proposed Sessions for the 2007 TRB Annual Meeting*

The following session topics were proposed for the 2007 TRB Annual Meeting:

- Needs for organizational, institutional, and cultural change for the purpose of asset management implementation.
- Work force development to enhance partnership between universities and state DOTs.
- Knowledge management at universities, research institutions, and public agencies.
- A continuing discussion on Session 710: Wall Street Speaks.
- Innovative transportation financing to sustain unsustainable transportation systems. For instance, reconstruction in Florida, Iowa, New Jersey, Ohio, Oregon, Washington, and Wisconsin is heavily needed, what do the state DOTs think about this?

- Design/build as part of asset management practice.
- Data collection, processing, and management for effective asset management. Arrangement of a workshop, call for papers, and speakers on data issues need to be made.
- Analytical tools and techniques to fill the gaps of tradeoff analysis.
- Implementation of asset management principles for improved decision-making.

### 13. Upcoming Meeting/Conferences

#### a) *The Asset Management Committee 2006 Mid-year Meeting*

The 2006 mid-year meeting of the asset management committee will be held in conjunction with the AASHTO Asset Management Subcommittee meeting in Traverse City, Michigan, July 19<sup>th</sup>-20<sup>th</sup> (Sessions for the two committees will be separately arranged in the afternoon of July 19). Topics to discuss include:

- New ideas for research.
- NCHRP pooled fund studies.
- Revisit and coordinate the two strategic plans (joint topic for the two committees).
- Trading issues.
- Workforce issues.
- Safety and enforcement side of safety issues.
- Asset management topics for local agencies.

#### b) *The 9<sup>th</sup> Inter. Conference on Application of Advanced Technology in Transportation (AATT)*

The AATT provide an excellent learning forum to transportation professionals to examine an array of innovative technologies and strategies to solve various transportation problems in the areas of infrastructure, operations and planning, and information systems. The 9<sup>th</sup> AATT will be held in Chicago, IL, August 13-16, 2006.

#### c) *The 7<sup>th</sup> National Asset Management Conference*

- The 7<sup>th</sup> International Conference on Managing Pavement Assets is scheduled in Calgary, Canada on June 24-28, 2008. Lynne Falls mentioned the possibility of concurrently holding or overlapping the 7<sup>th</sup> National Asset Management Conference with the 7<sup>th</sup> International Conference on Managing Pavement Assets. The suggestion appears to be appealing as it may draw a higher number of international attendants to the asset management conference. However, issues of travel to Canada were also raised.
- Roy Jurgens suggested determining the themes of both conferences. The asset management committee will reach out TRB committees involving transportation financing, safety, and planning to establish the conference theme.
- Lacy Love, Tom Maze, and Francine Shaw-Whitson will arrange conference calls to confirm conference chair, call for paper abstracts, and assign paper reviews.
- Paul Sachs will make coordination with the 7<sup>th</sup> International Conference on Managing Pavement Assets.

### Other Business

#### 14. Peer Exchanges of Experiences and Opportunities

- Geospatial Data. Sound decision-making requires integration of complete and accurate data that drive user-friendly decision-support tools. The following three publications

specifically deal with issues of using geospatial data to support transportation decision-making. i) TRB Transportation Research Circular E-C-46: Using Spatial Data, Tools, and technologies to Improve Program Delivery (November 2002); ii) TRB Conference Proceedings 31: Geospatial Information Infrastructure for Transportation Organizations (August 2004); and iii) Transportation Research Record 1836 (January 2004).

- Effective Way for Information Exchange. Conference calls were recommended to be an effective way for information exchange. Video conference and Web conferencing (with digitized materials downloadable from the Web) appeared to be the common approaches.

## 15. Informal Information Exchange

- Self-Introductions

At the conclusion of the meeting, attendees made self-introductions.

- Events in 2006-2008

- AISIM- University of Delaware June 10, 2005
- TRB Summer Conference- San Diego, CA July 9-11, 2006
- ABC40 Midyear Meeting- Traverse City, MI July 19-20, 2006
- 9<sup>th</sup> AATT- Chicago, IL August 13-16, 2006
- National Conference on Pavement Management- Norfolk, VA May 7-10, 2007
- 9<sup>th</sup> International conference on low-volume roads- Austin, TX June 24-27, 2007
- 7<sup>th</sup> Inter. Conf. on Managing Pavement Assets- Alberta, Canada June 24-28, 2008.

- Submissions in 2006

- NCHRP Synthesis topics February 10, 2006
- ABC40 –Triennial Strategic Plan March 1, 2006
- TCRP Synthesis topics March 31, 2006
- TCRP Topic submission June 2006
- Project 8-36 (Research for AASHTO Standing Committee on Planning) July 2006
- NCHRP Topic submission September 2006.

The Chair adjourned meeting at 5:25pm.